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EX PARTE OR LATE FILED

March 7, 1997

BY HAND DELIVERY

EX-PARTE LETTER

Mr. William F. Caton
Acting Secretary
Federal Communications Commission
1919 M Street, N.W., Room 222
Washington, D.C. 20554

Re: Federal State Joint Board on Universal Service
CC Docket No. 96-45

Dear Mr. Caton:

This letter is being filed, in duplicate, in accordance with the Commission's Rules, to report that late in the afternoon on March 6, 1997, Marideth Sandler, Associate Director of the Washington, D.C. office of the Governor of the State of Alaska, and Robert Halperin of Crowell & Moring LLP, Counsel to the State of Alaska met with John Clark, Sarah Whitesell and Frances Downey of the Common Carrier Bureau to discuss telemedicine in the State of Alaska. Also participating in this meeting (via telephone) were Andy Kline, telecommunications specialist for Lt. Gov. Ulmer; Karen Morgan, Deputy Director of the Division of Information Services of the Alaska Department of Administration; Deborah Erickson, Health Projects Manager of the Alaska Department of Health and Social Services; and Lori Kenyon and Philip Treuer, Common Carrier Specialists of the Alaska Public Utilities Commission. The attached document, which summarizes the State's positions, was provided.

In the event there are any questions concerning this matter, please communicate with the undersigned.

Very truly yours,

Robert M. Halperin

Enclosure
cc: John Clark
Sarah Whitesell
Frances Downey

TELECOMMUNICATIONS, HEALTH CARE ACCESS IN ALASKA, AND TELEMEDICINE

INTRODUCTION

The need for universal service support for telemedicine in Alaska is demonstrated by the following description of real-world events and the legislative history of the Telecommunications Act.

> "Weather conditions on the coast of northwest Alaska can be severe. High winds and blowing snow can close the airstrip for days. Such were the conditions when the CHA was called to see a patient who was having difficulty breathing. The patient had a collapsed lung. While caring for the patient, the CHA was called to the home of a woman who was six months pregnant and in labor. Both patients needed immediate medical treatment in a hospital setting. Severe cross winds prevented planes from landing. After four days of providing round-the-clock treatment, the CHA mobilized the village residents to create a snow-pack airstrip perpendicular to the existing runway. Unable to land in severe crosswinds, a plane was able to land with the wind. A plane arrived and transported the patients to the hospital 100 miles away. The patient with the collapsed lung eventually recovered and returned home. The young woman in premature labor was able to carry her child to term and delivered a healthy baby."
>
> Alaska Community Health Aide Program In Crisis
> (March 28, 1988)

The importance of assuring the availability of affordable telecommunications services to rural health care providers in Alaska was noted in the final debates on the Telecommunications Act:

> "I come from a State, Mr. President, one-fifth the size of the United States. It is rural in nature. We have a small population. We have people in our State who are just now getting telephone service as known to the rest of the country for the whole century, almost. Now, what we have assured here, as this program goes forward, is that universal service will be available to rural areas. It will be the state-of-the-art telecommunications system. It means that telemedicine will come to my State.
>
> My State, when I first came here, had no assistance whatever for people in small villages. They had to find their way to Indian hospitals in regional areas. We created a system of clinics. Those clinics are, by and large, operated by young women from the villages who have a high school

education and some technical training now. This bill means telecommunications will bring telemedicine in. They will be able to have a direct exposure of patients to doctors miles and miles away. They will be able to get assistance in dealing with mothers who have complications in pregnancies."

142 Cong. Rec. S691-92 (daily ed. Feb. 1, 1996) (remarks of Sen. Stevens) (emphases added)

1. Description of the physical and technical barriers to obtaining a higher band width to promote telemedicine access in Alaska.

Alaska has a total land mass of 586,000 square miles and constitutes one-fifth the area of the Unites States. With a 1995 population of 615,900, Alaska is the most sparsely populated state. 60% of the population (371,388 people) live in 3 urban centers; 14% (87,436 people) live in sub-regional centers which are 400-700 miles from the urban centers; and, 26% (157,076) live in small towns and villages located up to 1,300 miles from the nearest sub-regional center.

The majority of villages in Alaska are isolated from each other by considerable geographic distances and are not connected by any highway system. The official state map accompanying this document identifies the highway network in the state. The major highway networks connect Anchorage, the Kenai Peninsula, Fairbanks, and the Canadian border. Southeast Alaska depends upon water or air transportation and is served by the State Marine Highway System, which provides ferry transportation at least weekly between major Southeastern communities. Air transportation is, by necessity, the primary means of travel on a statewide basis. The first attached map illustrates key air mile distances and air fares between major communities. Air travel is always dependent upon the limitations of weather. The second attached map shows Alaska superimposed over the contiguous U.S., to further illustrate the distance required to travel from one area of the state to another.

Because of the vast size, remote location of some communities, rugged terrain, harsh weather conditions, and sparse population of Alaska, telecommunications infrastructure development has lagged the development in the "lower 48." Early telecommunications infrastructure was built by government entities. Even today, competition at the local and interexchange levels among telecommunication providers is minimal, as compared to the "Lower 48."

AT&T/Alascom is the state's dominant interexchange carrier and the only carrier that has facilities in most communities in the state. GCI is the only other interexchange carrier with facilities in the state. Networks by both carriers primarily consists of a combination of fiber optic cable, microwave radio and satellite. However, satellite/earth stations are the primary backbone used to communicate with rural and Bush communities. Many earth stations in Bush communities are analog with little redundancy or back-up power.

Three factors are primarily responsible for limited services and reduced levels of service quality in rural Alaska. One is the multiple satellite hops required to communicate from one community to the next; the second is the use of analog earth stations in Bush communities; and the third is the lack of fiber optic and digital service within the communities. Each of these factors slows the delivery of signals. And in many cases, the combined factors result in the inability to use fax machines or computer modems and also results in significantly higher charges.

Therefore, the major obstacle to providing telemedicine services in Alaska is that the public switched network is not currently capable of providing services in rural locations where there is significant need. In general, telemedicine services require highly reliable and error free switched digital services with sufficient bandwidth to carry video signals. It is also desirable to have these services billed based on use in order to keep costs low. Currently high bandwidth services are only available on a dedicated circuit basis.

2. Distribution of health care providers around the state, and the distances then required of rural people to travel to receive health care.

Health care delivery in Alaska is affected by the isolation and small populations of most communities. The majority of communities have populations too small to support a physician or mid-level practitioner (MLP - i.e., physicians' assistant or nurse practitioner). Currently, 33 of the 327 communities in the state have physicians as the highest level of medical provider. Another 25 communities have a MLP as the highest level of care. Community Health Aides (CHAs) represent the highest level of primary medical care in approximately 150 communities in the state.

CHAs, trained and employed by the Native health system, are paraprofessionals who do not generally function as independent practitioners, but consult by telephone or radio with physicians or MLPs regarding most patients (CHAs operate under standing orders for routine and emergency care). Based on the information provided over the phone/radio by the CHA regarding the patient's case; and based on the CHA's level of knowledge, skills, and abilities; the physician/MLP will determine whether it is necessary for the patient to travel to a hospital in a regional hub or urban community for further care.

Hospitals are located in 20 Alaskan cities. Small rural hospitals in Alaska are trending toward providing more out-patient care, and are also involved in the provision of long term care services. Larger hospitals in the urban communities offer specialized services, and serve as referral centers for other parts of the state. The largest urban center, Anchorage, provides many highly specialized medical services. Advanced specialty care and medical research activities associated with medical schools are available in large metropolitan areas outside the state, such as Seattle.

Examples of services provided at specialty hospitals in metropolitan areas outside of Alaska that are not available anywhere in Alaska include: gynecologic cancer surgery, organ transplant, pediatric subspecialties (e.g. genetics and neurology), bone marrow transplantation, and some advanced cancer therapies. Potential telemedicine applications for these services include: transmission of digital images of microscope specimens such as bone marrow from pediatric leukemia patients, and teleradiology services such as interpretation of ultrasound and MRIs.

Approximately 120 Alaskan communities are without the benefit of a full-time, on-site primary medical care provider of any type. These communities are served by the state public health nursing system, which provides itinerant public health services to every community in the state large enough to have a school. Alaska also has a strong emergency medical services system, and there are certified emergency medical technicians in most of these otherwise unserved communities.

The emergency medical services system in Alaska is heavily dependent on the accessibility and reliability of the telecommunications infrastructure. The state's public health nursing program is also reliant on the telecommunications infrastructure for the electronic maintenance, transfer, and integration of patient records using RPMS (Resource and Patient Management System).

RPMS is integrated with the Indian Health Service's and a number of tribal health organizations' patient record systems. Records are transmitted daily via modem to a central database, where they are merged into the existing electronic medical file for each client. T1 lines are not utilized by the State's 25 public health nursing centers because of the high cost of maintaining these lines and the high toll fees associated with usage. Use of this basic technology for increased speed and reliability of data transmission would be desirable if it were affordable.

One telecommunication need mentioned frequently by both private and public health care providers in rural areas of Alaska is the need to be able to communicate electronically for the purpose of sharing medical records and for medical consultations (via e-mail). Barriers to establishing electronic communications connections include access to affordable, high quality telecommunications lines, and the high cost of transmitting at long distance service charges for clinics and hospitals in rural communities.

3. Description of availability of Internet, ISDN, and T-1 services in Alaska.

a. How many Internet service providers are there in Alaska?
There are approximately 16 Internet service providers (ISPs), with servers located in Anchorage, Fairbanks, Ketchikan, Wasilla, Nome, Homer and Juneau.

b) Where is Internet service provided?
Internet service is provided for about $20/month (unlimited usage) to the following locations: Anchorage, Fairbanks, Homer, Juneau, Valdez, Kenai, Soldotna, Petersburg, Glennallen, Palmer, and Wasilla. In these locations, the Internet provider is either local or absorbs the end user's transport costs into the monthly flat rate.

Nome and Ketchikan have local ISPs, however, the flat rate for unlimited usage is around $50 - $60/month (unlimited usage). Presumably the higher flat rate reflects the cost of connecting the ISPs to a larger ISP in Anchorage.

Of Alaska's remaining 314 communities, approximately 30 are provided Internet service remotely, primarily through the use of frame relay.[1] The price to end user in these locations is about $50 - $60/month (unlimited usage).

c. What portion of Alaska does not have access to Internet? Internet service is not available locally or using frame relay to 284 of Alaska's 327 communities. In approximately 150 locations served by small earth stations, data transmission over voice-grade lines would be very poor and, in many cases, unusable for Internet.

d. What are the tolls charged to users not in their local calling area? If frame relay is available the cost of transport is about $30 to $40 per month and is generally incorporated into the flat rate charged to Internet users (see answer to question #4b). If frame relay is not provided by an IXC to a community then the end user must pay a toll charge of $.20 to $.35 per minute (regular MTS toll rates).

e. How many are equipped to handle ISDN and T-1 services.

ISDN Availability:

ISDN is currently available only in Anchorage.

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[1]Frame relay is increasingly being used by ISPs to provide access to areas outside of Anchorage or to connect their servers to a larger ISP in Anchorage. According to Alascom's intrastate tariff, frame relay services is available in about 35 of Alaska's 327 communities.

T-1 Access:

Of the 327 communities in Alaska, T-1 access is technically available in only 34 locations although it is currently tariffed (on an intrastate basis) only in Anchorage, Fairbanks, and Juneau.

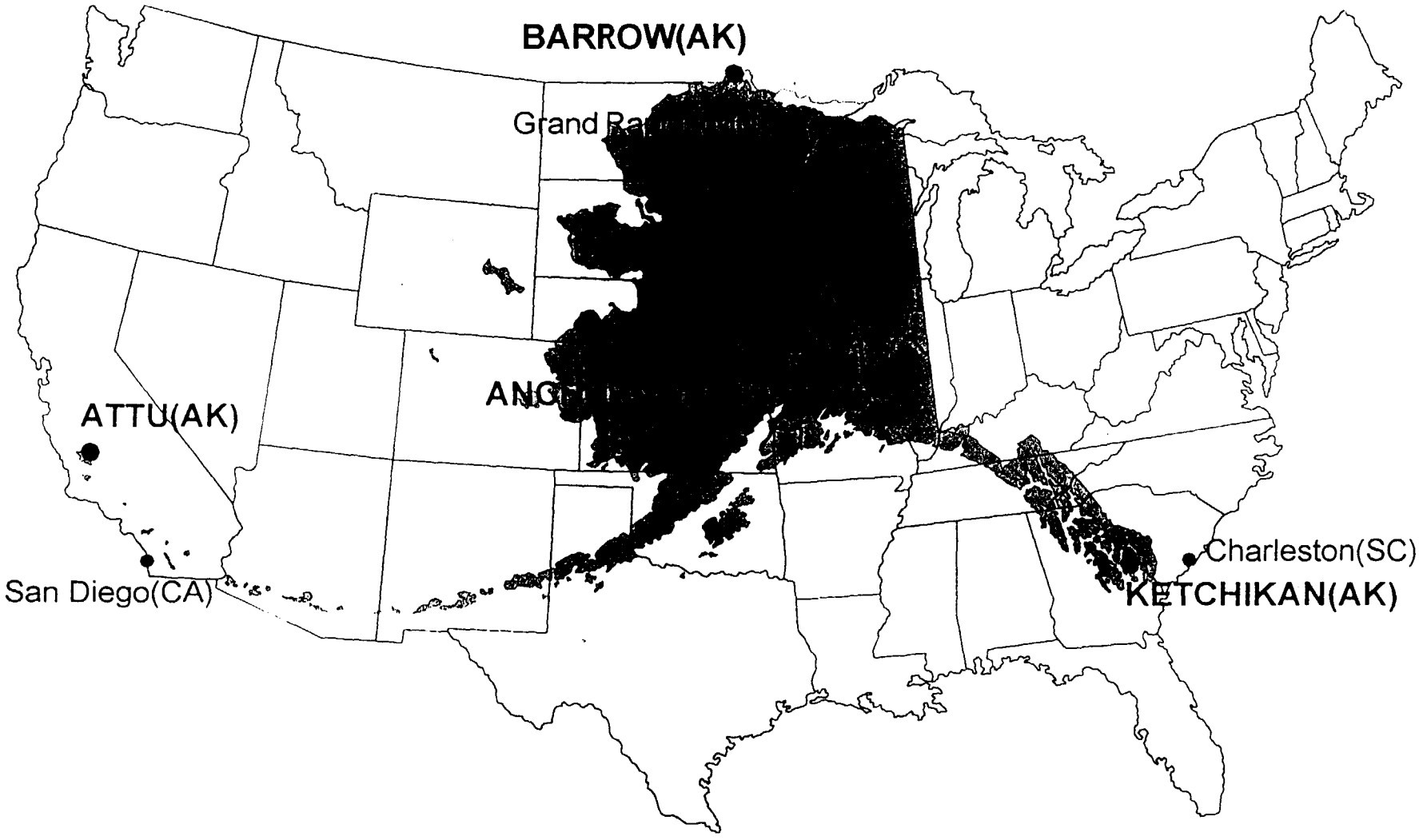
4. What the Commission should do to ensure the availability of telemedicine in rural Alaska.

Section 254(h)(1) provides that "[a] telecommunications carrier shall, upon receiving a bona fide request, provide telecommunications services which are necessary for the provision of health care services in a State . . . to any public or nonprofit health care provider that serves persons who reside in rural areas of that State at rates that are reasonable comparable to rates charged for similar services in urban areas in that State." (Emphasis added.)

Section 254(h) does not say that such services need to be provided only if the telecommunications carrier can provide the requested services at a reasonable rate in the absence of universal service support; the only prerequisite to the obligation to provide service to a qualifying health care provider is that the request be bona fide.

In many areas of rural Alaska -- including several communities which have a doctor present and in most of the communities in which a mid-level practitioner or community health aide provides the highest level of medical care -- the existing telecommunications infrastructure is insufficient to support telemedicine. In these communities, there is no Internet access for e-mail and there is no frame relay, ISDN or T1 service for transmission of x-rays or other visual medical information.

The Commission should provide universal service support to any telecommunications carrier serving a particular geographic area that (1) receives a bona fide request from a qualifying health care provider (2) for a telecommunications service in that same geographic area (3) if that telecommunications service is necessary to provide telemedicine services (4) to permit that carrier to acquire and deploy the infrastructure required to provide the requested services (5) if no other telecommunications carrier serving the geographic area in which such service is requested has the ability to provide the requested service. The carrier should then be required to provide the requested services at charges that are equivalent to the charges in urban areas of Alaska (i.e. Anchorage).



Prepared by the Alaska Department of Transportation & Public Facilities

5. Universal service support provided to rural health care providers for telecommunications services should eliminate differences in distance-sensitive charges between rural and urban areas.

Rural telecommunications is expensive for the reasons mentioned above and the lack of population or use to support the infrastructure and therefore reduce rates. The cost to develop and maintain telecommunications infrastructure far exceeds that in the "Lower 48." Due to the lack of highways, access to telecommunications sites is frequently done by airplanes and helicopters.

The State agrees with the Joint Board that where distance based charges incurred by rural health care providers are in excess of those charges incurred by commercial customers in the nearest urban area, the Telecommunications Act suggests strongly that such charges should be made comparable. As the Joint Board stated: "it seems that the whole thrust of section 254(h)(1)(A) is such that disparities in telecommunications rates based on distance should be reduced or eliminated by universal service support." (Joint Board Recommended Decision at ¶ 672.)

The Conference Committee report accompanying the final version of the Telecommunications Act makes clear that Congress intended the Commission to adopt universal service rules that would assure that telecommunications services requested by rural health care providers were available at costs that are comparable to the costs for similar services in urban areas. Congress was focused on both availability of services to rural health care providers and the affordability of those services:

> New subsection (h) of section 254 is intended to ensure that health care providers for rural areas, elementary and secondary school classrooms, and libraries have affordable access to modern telecommunications services that will enable them to provider medical and educational services to all parts of the Nation.
>
> The ability of K-12 classrooms, libraries and rural health care providers to obtain access to advanced telecommunications services is critical to ensuring that these services are available on a universal basis.

H.R. Rep. 104-458, 104th Cong., 2d sess. 132 (emphases added). Congressional intent cannot be met unless the Commission takes steps to assure that rural health care providers throughout America -- including those in rural portions of Alaska -- are able to obtain affordable telecommunications services, that is, services at a cost comparable to the cost for similar services in urban areas.

BY DISTANCES AND AIR FARES

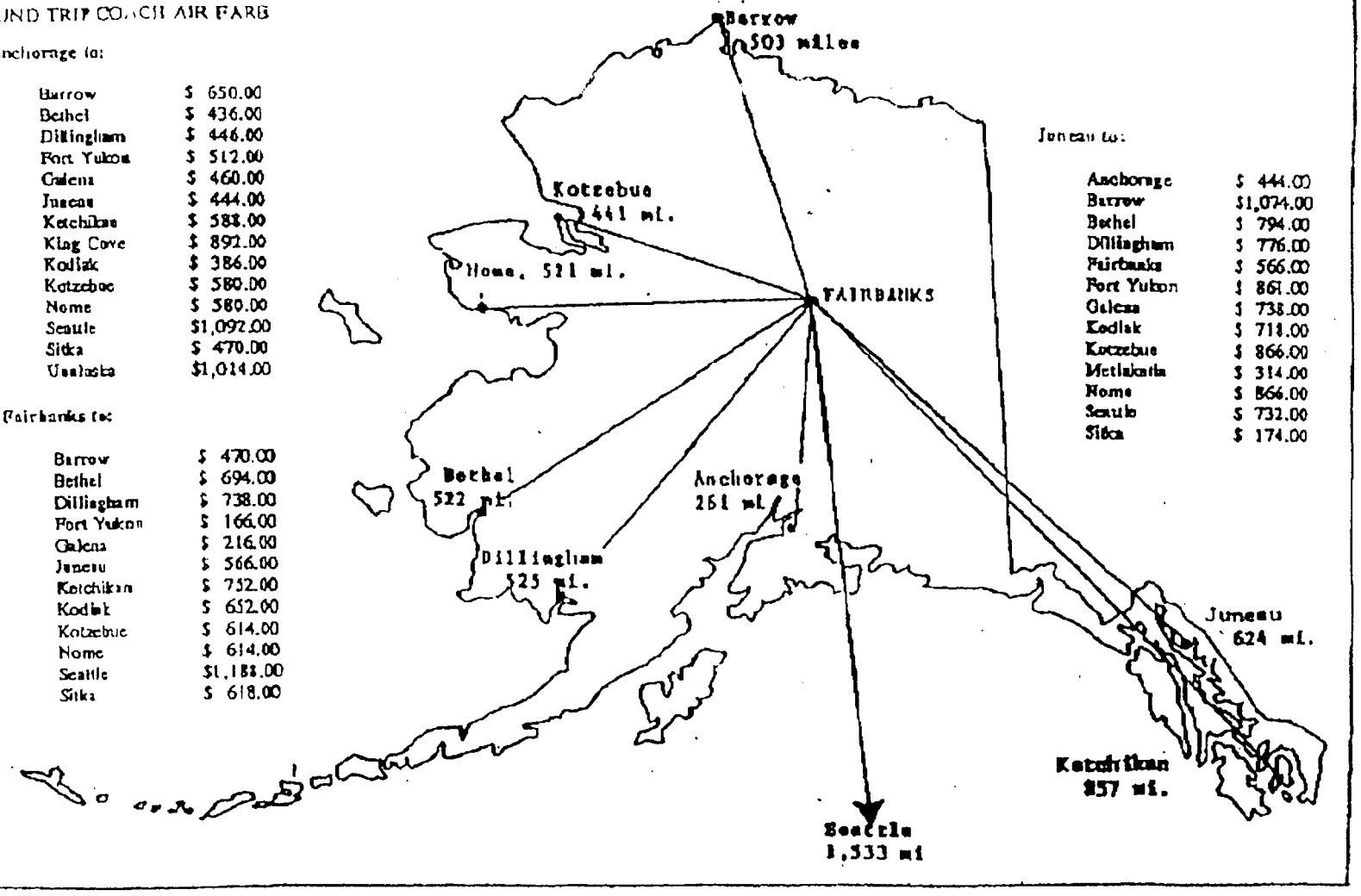
ROUND TRIP COACH AIR FARE

Anchorage to:

Barrow	$ 650.00
Bethel	$ 436.00
Dillingham	$ 446.00
Fort Yukon	$ 512.00
Galena	$ 460.00
Juneau	$ 444.00
Ketchikan	$ 588.00
King Cove	$ 892.00
Kodiak	$ 386.00
Kotzebue	$ 580.00
Nome	$ 580.00
Seattle	$1,092.00
Sitka	$ 470.00
Unalaska	$1,014.00

Fairbanks to:

Barrow	$ 470.00
Bethel	$ 694.00
Dillingham	$ 738.00
Fort Yukon	$ 166.00
Galena	$ 216.00
Juneau	$ 566.00
Ketchikan	$ 732.00
Kodiak	$ 652.00
Kotzebue	$ 614.00
Nome	$ 614.00
Seattle	$1,188.00
Sitka	$ 618.00



Juneau to:

Anchorage	$ 444.00
Barrow	$1,074.00
Bethel	$ 794.00
Dillingham	$ 776.00
Fairbanks	$ 566.00
Fort Yukon	$ 861.00
Galena	$ 738.00
Kodiak	$ 718.00
Kotzebue	$ 866.00
Metlakatla	$ 314.00
Nome	$ 866.00
Seattle	$ 732.00
Sitka	$ 174.00

Attachment A

DOCUMENT OFF-LINE

This page has been substituted for one of the following:

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o Microfilm, microform, certain photographs or videotape.

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